

IN THE CLAIMS

1. (Currently Amended) A high-frequency power amplifier having differential inputs, comprising:

a power supply unit;

a first amplification circuit unit for amplifying high-frequency differential input signals of differential input terminals INA, INB into outputting a single high-frequency signal;

an intermediate impedance matching unit for impedance-matching the single high-frequency signal amplified by the first amplification circuit unit;

a second amplification circuit unit for receiving and amplifying the impedance-matched single high-frequency signal from the intermediate impedance matching unit and outputting the amplified signal to an antenna through an output terminal thereof ;

a power control circuit unit for controlling a power output to the antenna through the output terminal of the second amplification circuit unit by ~~varying~~ varying a voltage of a power control terminal;

a first bias circuit unit for determining an operation reference point of the first amplification circuit unit; and

a second bias circuit unit for determining an operation reference point of the second amplification circuit unit.

2. (Original) A high-frequency power amplifier having differential inputs according to claim 1, further comprising a power breaking circuit unit for breaking the power output to the antenna through the output terminal of the second amplification circuit unit when a voltage of a power breaking terminal becomes a ground voltage.

3. (Cancelled)

4. (Currently Amended) A high-frequency power amplifier having differential inputs according to claim 1, wherein the second amplification circuit unit comprises one or more amplification elements and one or more elements for decreasing an output ~~harmonic~~ high frequency component of the second amplification circuit unit.

5. (Original) A high-frequency power amplifier having differential inputs according to claim 1, wherein the intermediate impedance matching unit comprises one or more intermediate impedance matching elements and impedance elements.

Claims 6-8 (Cancelled)